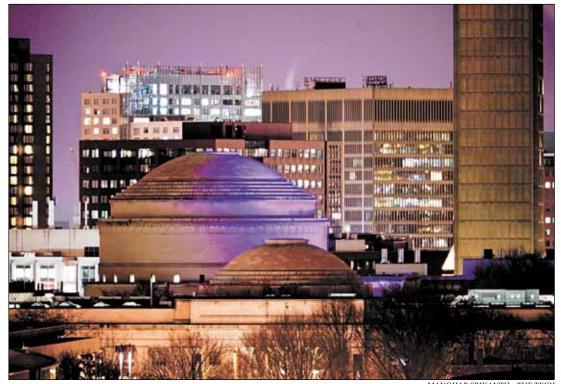
#### MIT's Oldest and Largest Newspaper



WEATHER, p. 2 SAT: 50°F 39°F Partly sunny SUN: 50°F 29°F Sunnv

Volume 131, Number 12 tech.mit.edu Friday, March 11, 2011

#### **Purple spotted across campus**



Hackers illuminated both domes with purple lights and placed a purple ribbon above the entrance to 77 Mass. Ave on Wednesday. The lights honor Paint the Campus Purple week and the Relay for Life to fight cancer. Relay for Life will take place in Johnson from 6 p.m. on Saturday to 6 a.m. on Sunday.

#### Four MacVicar fellows named

#### Professors recognized for undergraduate teaching

By Margaret Cunniff ASSOCIATE NEWS EDITOR

On Tuesday, four professors were announced as the 2011 MacVicar Fellows. Professor Bishwapriya Sanyal of the Department of Urban Studies and Planning, Associate Professor Christopher A. Schuh of the Department of Materials Science and Engineering, Professor George C. Verghese of the Department of Electrical Engineering and Computer Science, and Professor Patrick H. Winston '65 of the Department of Electrical Engineering and Computer Science were recognized for their contribu-

The Margaret MacVicar Faculty Fellowship was created in 1991 to recognize excellence in undergraduate teaching at MIT. There are cur-

tions to undergraduate education

rently 43 MacVicar fellows, who are appointed for 10-year terms, during which they receive \$10,000 of discretionary funds annually for support of educational activities.

The program is named for the late Margaret MacVicar, Professor of Physical Science. MacVicar served as MIT's first dean for undergraduate education and founded the MIT Undergraduate Research Opportunities Program (UROP).

Fellows are nominated by any member of the MIT community. An advisory committee - including faculty, students, and Dean for Undergraduate Education Daniel E. Hastings PhD '80 as chair - choos-

The MacVicar Fellows universally believe that undergraduate teaching is a valuable pursuit. "I like teaching ... my brain reacts differently after I had a good class with

students," said Sanyal.

Since arriving at MIT, Sanyal has seen his teaching style change to better meet the needs of the students. "When you are a young assistant professor, your first inclination is to show students how much you know. Impressing is not necessarily what makes a student learn ... it cannot be a battle between you and the students," he explained.

Increasingly, Sanyal has viewed teaching as a cooperative process between students and teachers. "I'm more and more intrigued by the kind of interaction that leads to learning," said Sanyal, who believes that "sharing vulnerability" - admitting that there are answers the professor does not know - leads to increased confidence in students. Sanyal tries to focus on how to

MacVicar, Page 13

#### Tuition, self-help costs will rise in fall

FinAid budget set to increase 5%; hiked work/loan contribution

By Leo Zhou

Tuition will increase 3.9 percent to \$40,732 in the 2011-2012 academic year, according to a release from the MIT News Office. While the financial aid budget is also rising 5 percent to \$91.3 million, the student self-help costs will increase from \$3,400 to \$4,400 for students with annual family income of \$75,000 or less, and from \$5,500 to \$6,000 for the other financial aid recipients.

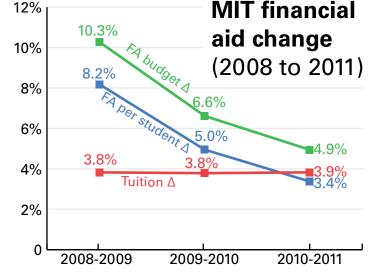
The 5 percent increase in the financial aid budget next year is notably smaller than recent years. In addition, an expanding student body appears to further complicate the net effect of that increase. According to Dean of Admissions Stuart Schmill '86, the undergraduate enrollment will grow from 4285 to approximately 4350 next year. This means that the financial aid budget per student will increase by only about 3.4 percent, marking the first time in recent years that tuition will outgrow the per capita aid budget.

Elizabeth M. Hicks, executive director of Student Financial Services, said looking at the financial aid budget per enrolled student is an oversimplification of the budgeting process. She said the budget was deliberated after they concluded that the economy has improved and that family contribution in the past few years has been stable or decreasing. Therefore, they expected that on average, parents will be able to pay a little bit more.

"We are in a situation now where we are stemming the growth in the undergraduate financial aid budget. That's been a strategic decision," said Hicks, explaining that the financial aid budget in the past decade has been growing at a faster pace than tuition. In any case, Hicks said their budgeting ensured that the full need of every MIT stu-

Nevertheless, the student selfhelp costs have gone up significantly for next year, especially for students from low-income families. Hicks clarified that self-help is in fact a part of the financial aid package, and a way for students to meet their need by working or taking out loans. "If you look across the nation, the number one type of aid students receive is loans," said Hicks.

Tuition, Page 10



#### IN SHORT

**CADE applications** for student groups is today at 11:59 p.m.

Daylight Savings Time starts this Sunday! Move your clocks forward an hour.

Fourth-quarter PE registration will continue until next Wednesday. Visit http://mitpe. *com* to sign up for a class.

Pre-med registration for 2013 is now open. Applicants need to complete a registration meeting with a member of the pre-health advising staff.

#### MIT is named second in the World Reputation Rankings, a system based on standing among academics across the world. Harvard was ranked first.

Secretary of Homeland Security Janet Napolitano will deliver the Compton Lecture on Monday, March 14 in Kresge Auditorium at 4 p.m.

Regular Action admissions decisions for the Class of 2015 will be released on Monday night at http://decisions.mit.edu.

Send news information and tips to news@tech.mit.edu.

#### Chen wins Lemelson Student Prize

Graduate student recognized for innovation in 'humanized mouse'

By Isabella Wei STAFF REPORTER

Alice A. Chen G is the winner of this year's Lemelson-MIT Student Prize for her innovative contributions to biotechnology, most notably the "humanized mouse" - a mouse with a tissue-engineered human liver. Chen is a PhD student at the Harvard-MIT Division of Health Sciences and Technology and Harvard School of Engineering and Applied Sciences. The \$30,000 student prize is awarded annually to an MIT senior or graduate student who has displayed a "portfolio of inventiveness."

Chen's has developed a method of inserting tissue-engineered human liver into mice that allows for a better understanding of how the human liver metabolizes drugs - knowledge which can aid future drug development. She described the process of inventing this technology as "six-anda-half years of standing on the shoulders of giants, working closely with smart and generous people, and being very patient and persistent".

Chen said her reaction to winning the prestigious Lemelson-MIT prize was "shock and awe."

"The family of Lemelson-MIT student prize winners are so incredibly remarkable that I still cannot believe that I'm put in that company. It's a huge honor," Chen said. The Lemelson panel tricked Chen by convincing her they needed her help on a project with one of the invent teams, and then surprised her with the good news once she was in the office.

Chen claimed she never aspired to a career in science but was instead guided into the field by doing research during her undergraduate years. "That

Lemelson Prize, Page 10

#### **PROTECTION MEANS PEACE**

See why the West Bank's fence is necessary to preserve Israel's safety.

OPINION, p. 4

#### **LUPE FIASCO IS UNLABELABLE**

As is his new album, Lasers, which straddles the mainstream and independent.

ARTS, p. 5



#### THE MANY LABS **OF MIT**

The Tech brings you inside history-making laboratories from across the Institute.

PHOTO, p. 8-9



#### **ARTHURSAURUS** REX

Meet the latest addition to the ever-growing cast of The Tech's cartoons!

FUN, p. 6

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#### Obamas host anti-bullying conference at White House

WASHINGTON — President Barack Obama poked fun at his own big ears and funny name Thursday, but all in the service of a serious subject as he and Michelle Obama opened a White House conference to spur anti-bullying efforts in schools and communities nationwide

"If there's one goal of this conference, it's to dispel the myth that bullying is just a harmless rite of passage or an inevitable part of growing up," Obama told about 150 students, parents, teachers, and advocates of prevention measures gathered in the East Room. "With big ears and the name that I have, I wasn't immune," he added. "I didn't emerge unscathed."

While Obama elicited chuckles with that memory, he and other participants also recalled examples from more recent and tragic stories of young people who killed themselves rather than endure further abuse from classmates, often for being gay or for being thought to be gay.

The conference, at a time when the president and his advisers are dealing with budget fights in Congress and upheaval in the Middle East, underscored the power of the presidency and the presidential residence in raising awareness of issues.

—Jackie Calmes, The New York Times

#### Cousin of Afghan president killed in NATO raid

KABUL, Afghanistan — A cousin of Afghanistan's president was killed Wednesday during a night raid by NATO and Afghan forces in which they detained the man's son as a suspected Taliban commander, as well as at least two of the family's bodyguards.

The case brought the delicate issue of civilian casualties into the presidential palace and added to the already tense relationship between the Afghans and the Americans. It also raised questions about whether a member of the extended family of President Hamid Karzai might have Taliban ties, or whether bad intelligence led to a deadly raid on an innocent family's home.

Either way, the raid raises the prospect of another intense flare-up between NATO and Afghan officials, coming after two other cases of civilian casualties in the past three weeks.

This raid occurred in the southern province of Kandahar, in the rural village of Karz, the Karzai clan's ancestral home.

The death was confirmed by the president's half brother, Ahmed Wali Karzai, the chairman of the provincial council in Kandahar, who said the killing was a mistake.

He said the raid was a joint operation by the NATO force — the International Security Assistance Force — and the Afghan National Army that had gone awry.

—Alissa J. Rubin and James Risen, The New York Times

#### Sheen sues TV show's creator, Warner seeking \$100 million

Charlie Sheen escalated his war with the creator of his hit comedy *Two and a Half Men* and the studio that produces it by filing a suit Thursday demanding more than \$100 million in damages for halting production on episodes planned for this season and then removing him from the show.

The suit, obtained and posted by the celebrity gossip website TMZ, is in response to the decision this week by the studio, Warner Brothers, to fire Sheen, citing both his behavior — which has included drug use and accusations of violence toward women — and his comments about the show's creator, Chuck Lorre, and studio executives.

In the suit, filed Thursday in Superior Court in Los Angeles, Sheen goes on the offensive, saying Lorre first stopped production on the series and then forced Warner to dismiss Sheen "to serve his own ego and self-interest."

—Bill Carter, The New York Times

# Consumer agency to post a database of unsafe products

By Andrew Martin

THE NEW YORK TIMES

Despite threats of a budget cut, the Consumer Product Safety Commission will unveil on Friday a database that will allow the public to search for complaints about the safety of everyday products.

Called SaferProducts.gov, the database will essentially make public the types of injury and death reports, and assorted hazard complaints, that the commission has gathered for years, but that have largely remained out of public view.

Consumers also will be able to file complaints at the website for all types of products except for food, drugs, cosmetics, cars, and guns.

The database is the result of legislation in 2008 that gave the commission significantly more authority and money after an onslaught of recalls, many of them for children's products from China.

"It's incredibly important because consumers currently are in the dark when it comes to hazards posed by consumer products," said Rachel Weintraub, director of product safety at the Consumer Federation of America, an advocacy group.

"They either never find out or find out when it's too late."

Though the database will be considered live as of Friday, consumers will not be able to search reports from other consumers until early April. But they will be able to file reports on the site and browse through product recalls immediately.

The reason that consumers will not be able to search the database immediately is that manufacturers have 10 days to respond before a report is posted.

But even as the site goes live, manufacturers and some members of Congress are still pushing for changes.

Among them is Rep. Mike Pompeo, R-Kan., who is trying to strip financing for the database until it can be revised, a move some Democrats have vowed to block.

In an interview, Pompeo said the database should be revised so that the commission and manufacturers could better vet reports before they are posted to ensure accuracy. The current iteration of the database, he said, would make it easy to post bogus reports that could lead consumers astray.

"This is a .gov site," he said, referring to the government's domain name. "This is a site where consumers would have a higher level of expectation about the data presented."

Rosario A. Palmieri, vice president for infrastructure, legal, and regulatory policy at the National Association of Manufacturers, said the commission's definition of who could file reports was too broad, allowing trial lawyers and consumer advocates among others.

"We just want it fixed," he said.
"We want the information in the database to be accurate."

Scott Wolfson, spokesman for the commission, said they wanted to encourage all types of people to file reports on the database to make it as robust and informative as possible.

He said the commission screened every report to make sure it contained certain core information and that it pertained to the safety of the product, not its performance.

# GM's chief financial officer to step down, treasurer will take his place

By Nick Bunkley

THE NEW YORK TIMES

DETROIT — General Motors said Thursday that its chief financial officer, Christopher P. Liddell, was stepping down, less than four months after helping the automaker execute the largest initial public offering in American history.

The announcement is the latest in a string of management shuffles for GM, whose board and top executives are virtually all new since the company's bankruptcy in 2009. Liddell had been widely expected to be among the contenders to eventually become GM's chief executive.

He will be succeeded by the company's treasurer, Daniel Ammann, and a new treasurer will be appointed later, GM said. Liddell, 52, said his decision to leave was not a sign of any financial turbulence ahead for GM and was unrelated

to being passed over last fall when Daniel F. Akerson, a board member, was selected to succeed Edward E. Whitacre Jr. as chief executive.

"When I came to GM, my primary goal was to help get the company back on its feet," Liddell told reporters in a conference call. "I'm incredibly proud of what we were able to achieve in a relatively short period of time."

He added, "There's no wider context other than that I've done what I hoped to achieve as CFO and it's time to move on."

Ammann spoke only briefly, saying that investors would see "absolutely more of the same" from GM under his guidance.

Nicholas Colas, chief market strategist at the ConvergEx Group, said he expected Ammann to continue Liddell's focus on eliminating debt, funding its pensions, and paving the way for the federal government to sell its stake. Ammann, 38, advised GM during its bankruptcy reorganization and played a large role in selling GM to investors ahead of the November stock offering.

Like Liddell, he is a native of New Zealand. He joined GM a year ago, working out of the company's New York office, from the investment firm Morgan Stanley, where he was managing director and head of industrials investment banking.

"Dan's depth of knowledge of the financial community and our business will be instrumental as we continue to earn the trust of global investors and customers," Akerson said in a statement.

Liddell's resignation seemed as much of a surprise as his decision to join GM. The company's future was murky when he arrived, and he had recently quit as Microsoft's chief financial officer with aspirations of holding the top job at another technology company.

WEATHER

### Both sides of March this weekend

By Austin DiOrio

An old weather adage describes March entering as a lion and leaving like a lamb. Fortunately, March hasn't been too terrible so far, bringing only mild temperatures and no snow. Although this mild pattern will persist, today will be a downright miserable March day with heavy

rain and strong winds. The bad news will continue for skiers as warm air pushes very far north, leaving the lower elevations of ski resorts wet, rather than fluffy. However, don't be completely discouraged; the other face of March will emerge later this weekend. Expect a better day on Saturday as the clouds slowly clear out. Sunday looks to be a pristine late winter day with mostly sunny skies and a high near 50°F.

#### **Extended Forecast**

Today: Rain, heavy at times. High 53°F (12°C). Strong winds SE at 15–20 mph.

Tonight: Rain ending. Low 37°F (3°C). Still breezy with

winds S at 8–12 mph.

Tomorrow: Partly sunny. High 50°F (10°C). Low 39°F (4°C).

Gusty winds SW at 18–22 mph. **Sunday**: Mostly sunny. High near 50°F (10°C). Low 29°F

**Monday**: Sunny, but cooler. High around 40°F (4°C). Lows in the mid-20s°F (-4°C).

Weather Fronts

Trough
Warm Front
Sure
Cold Front

Precipitation Symbols

Snow Rain
Showers 

Light 

Moderate 

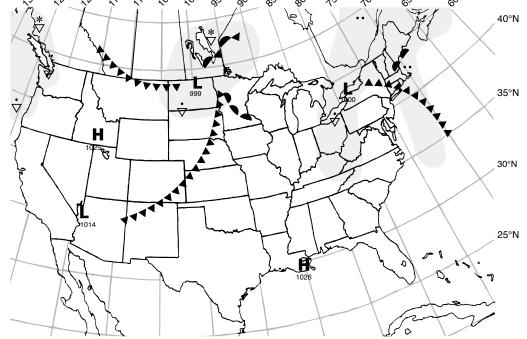
Heavy 

Thunderstorm

Heavy 

Thunderstorm

Compiled by MIT
Meteorology Staff
and The Tech



Situation for Noon Eastern Time, Friday, March 11, 2011

Friday, March 11, 2011

# Wisconsin Democrats see a gift in bitter battle over unions

By Monica Davey and A. G. Sulzberger

THE NEW YORK TIMES

MADISON, Wis. — After nearly a month of angry demonstrations and procedural maneuvering in the State Capitol here, Gov. Scott Walker won his battle Thursday to cut bargaining rights for most government workers in Wisconsin.

But his victory, after the state Assembly passed the bill, also carries risks for the state's Republicans who swept into power in November.

Democratic-leaning voters appeared energized by the battle over collective bargaining on a national stage. The fight has already spurred a list of potential recall elections for state lawmakers this spring. Protesters are planning more large demonstrations this weekend.

"From a policy perspective, this is terrible," said Mike Tate, the leader of the Democratic Party of Wisconsin.

"But from a political perspective, he could not have handed us a bigger gift," Tate said of the governor.

In the past 24 hours, he added, the state party had received \$360,000 in contributions and volunteers have streamed into offices where signatures were being collected for recall bids.

Political analysts said they would watch for the fallout of the Wisconsin vote, and whether it would affect similar battles now playing out over collective bargaining issues in statehouses elsewhere, including Ohio, Michigan, Iowa, and Indiana.

Republicans here contend that Wisconsin residents were seeking change in the election last fall and that this was just the sort of bold move they would ultimately embrace.

But Democrats say the collective bargaining fight may lead to a political shake-up in the Capitol, where more than a dozen senators (Republicans and Democrats) are now the subjects of heated recall efforts.

"The voters absolutely sent a message that they wanted fiscal

conservatism," said Michael B. Wittenwyler, a lawyer who once served as a campaign strategist for Democrats. "Now they learned what that really means and I think they're saying, 'Hmmm, maybe that's not what we really want."

Others, though, wondered whether the protests might fade.

"If things go back to normal and Wisconsin continues to improve economically, balances its budgets, bring jobs, there probably won't be a lot of pain for Republicans down the road," said Bill McCoshen, who has been a campaign manager for Republicans. "I think things will get back to normal for the average Wisconsin citizen, but it's going to take some time, though, before government employees get over this," he added.

But Peggy Coyne, a middle school teacher, predicted more big crowds, more rallies, more protests. "We'll keep our presence known here," she said. "I think they felt there would be a little fuss and we'd go away. But this continues to get bigger and bigger."

# Hearings on American Muslims reveal a deep partisan rift

By Sheryl Gay Stolberg and Laurie Goodstein

THE NEW YORK TIMES

WASHINGTON — A congressional hearing on Thursday addressing homegrown Islamic terrorism offered divergent portraits of Muslims in America: one as law-abiding people who are unfairly made targets, the other as a community ignoring radicalization among its own and failing to confront what one witness called "this cancer that's within."

Attacked by critics as a revival of McCarthyism and lauded by supporters as a courageous stand against political correctness, the hearing — four hours of sometimes emotional testimony — revealed a deep partisan split in lawmakers' approach to terror investigations and their views on the role of mosques in America.

Republicans drilled down with questions about whether Muslims cooperate with law enforcement, and singled out a Washington-based advocacy group, the Council on American Islamic Relations, casting it as an ally of terrorists. Rep. Peter T. King, a Long Island Republican and the Homeland Security Committee Chairman who convened the session, declared it a "discredited group."

Democrats sought to put the spotlight on the lone law enforcement witness, Sheriff Leroy D. Baca of Los Angeles, who testified that Muslims do cooperate, and they cited a Duke University study that found that 40 percent of foiled domestic terror plots had been thwarted with the help of Muslims.

Among the detractors was Rep. Loretta Sanchez, D-Calif., who sharply criticized the Republicans' star witness, M. Zuhdi Jasser, a Phoenix doctor who, as founder of the American Islamic Forum for Democracy, has been deeply critical of fellow Muslims.

Jasser used the cancer analogy; in his testimony, he complained that too often, Muslim leaders counsel Muslims against speaking to law enforcement officials without a lawyer.

"The right to have an attorney present when speaking to law enforcement is a specific principle of American civil liberty," Sanchez said sharply, adding, "So by what legal principle do you assert that any minority in America should waive that American principle?"

Jasser, who described himself as a devout Muslim, sought to draw a distinction between spiritual Islam and what he called "political Islam" — the notion that a government or country should be run according to principles of Islamic law. He said there was an inherent contradiction between that notion and the American tenet of separation of church and state.

If Jasser was the Republicans' star, the sheriff was the Democrats'. He said Muslims often cooperated as individuals, "without the cover" of organizations. "The truth is that Muslims are just as independent, just as feisty, just as concerned about safety," he said. "They certainly don't want their homes or their mosques blown up."

## Regulators and drug company reach agreement for greater federal oversight

By Reed Abelson and Natasha Singer

THE NEW YORK TIMES

Federal regulators reached an agreement Thursday with a unit of Johnson & Johnson that would impose greater federal oversight at three manufacturing plants responsible for recalls of Children's Tylenol and many other popular over-the-counter medicines.

The regulators say the manufacturing practices failed to comply with federal law.

The proposed consent decree with the Food and Drug Administration stems from recurring problems for more than a year with products made by Johnson & Johnson's McNeil Consumer Healthcare division at sites in Pennsylvania and Puerto Rico. Lawmakers and regulators have repeatedly criticized the company for its inability to manage production at these plants.

"We've had a long engagement with McNeil over the last year with regard to their quality system," Douglas Stearn, an FDA official who helps oversee compliance by drug makers, said in an interview Thursday. "We think this represents necessary important steps to assuring quality across the board."

Under the agreement, which needs approval from a federal judge, Johnson & Johnson would be required to hire an independent expert to determine whether operations at all three plants meet federal standards and to ensure quality systems are in place.

The agreement covers a plant in Fort Washington, Pa., that the company closed last year for an overhaul amidst a nationwide recall of children's medicines; a plant in Las Piedras, P.R., that was the subject of an agency warning letter last year; and a plant in Lancaster, Pa., that makes products like Pepcid for a joint venture with

Merck. McNeil cannot reopen the Fort Washington plant until an independent expert determines the plant meets all federal standards and passes an agency inspection, according to the agreement.

The agreement would also give the FDA the authority to require McNeil to stop manufacturing or to institute recalls. While the agency did not levy a fine in this case, McNeil could face fines of \$15,000 a day for violating the decree, up to a total of \$10 million a year.

While the proposed consent decree covers a civil complaint, the FDA would not comment on the status of any related criminal investigations.

Last year, an FDA official testified at a congressional hearing that the agency had referred the McNeil case to its Office of Criminal Investigations. A spokeswoman for McNeil confirmed that other federal investigations were under way.

#### New view of how humans moved away from apes

Anthropologists studying living hunter-gatherers have radically revised their view of how early human societies were structured, a shift that yields new insights into how humans evolved away from

Early human groups, according to the new view, would have been more cooperative and willing to learn from one another than the chimpanzees from which human ancestors split about 5 million years ago. The advantages of cooperation and social learning then propelled the incipient human groups along a different evolutionary path.

Anthropologists had assumed until now that hunter-gatherer bands consist of people fairly closely related to one another — much as chimpanzee groups do — and that kinship is a main motive for cooperation within the group. Natural selection, which usually promotes only selfish behavior, can reward this kind of cooperative behavior, called kin selection, because relatives contain many of the same genes.

The new data on early human social structure furnishes the context in which two distinctive human behaviors emerged, those of cooperation and social learning, Kim S. Hill of Arizona State University said

-Nicholas Wade, The New York Times

#### Number of cancer survivors in US rises by 20 percent

About one in every 20 adults in the United States has survived cancer, including nearly one-fifth of all people over 65, according to new federal data.

The numbers, released Thursday by the Centers for Disease Control and Prevention and the National Cancer Institute, indicated the number of cancer survivors increased by about 20 percent in just six years, to 11.7 million in 2007, the latest year for which figures were analyzed, from 9.8 million in 2001. In 1971, the number of cancer survivors was 3 million.

About 65 percent of cancer survivors have lived at least five years since receiving their diagnosis, 40 percent have lived 10 years or more, and nearly 10 percent have lived 25 years or longer.

Dr. Thomas Frieden, director of the CDC, said the increase in cancer survivors was due to several factors, some of which varied by type of cancer. In some cases of breast cancer and colon cancer, for example, improved treatment and increased follow-up after treatment have helped increase survival. In others, like prostate cancer, an explosion in screening has identified many men with the disease, but the cancer is often so slow-growing that they would be unlikely to die from it in any case.

—Pam Belluck, The New York Times

#### White House announces steps against Gadhafi

The White House announced Thursday a five-point program of steps to isolate Moammar Gadhafi and ultimately drive him from power, all stopping well short of military action, but distanced itself from the assessment of the nation's top intelligence chief, who said Thursday that "over the longer term" Gadhafi's superior firepower "will prevail" over the opposition.

The steps announced include a partial embrace of the opposition movement as well as threats to track and prosecute, in international courts, loyalists to Gadhafi who commit atrocities. Secretary of State Hillary Rodham Clinton said she would meet with Libyan opposition leaders next week, and President Barack Obama's national security adviser made it clear that Washington was looking for ways to aid the Libyan leader's opponents.

"We're coordinating directly with them to provide assistance," said the adviser, Thomas E. Donilon, although the United States has stopped short of recognizing them as the legitimate government of Libya.

The help, he added, consisted of humanitarian aid and advice on how to organize an opposition government.

—David E. Sanger, The New York Times

#### Startups rush to bring chat rooms to smart phones

For all the clever things smart phones can do these days — like stream movies and play 3D games — the latest mobile craze centers on revamping one of the earliest phone applications, the text message.

Apps from a wave of new startups allow multiple people to participate in the same conversation on a mobile phone, like a group chat room or conference call held by way of text message. The new applications, most of which are free, include GroupMe, FastSociety, Beluga, Kik, TextPlus, PingChat, HurricaneParty, and Yobongo.

Several of these services have made their debuts just this week, right before the opening on Friday of South by Southwest, the technology and music festival in Austin, Texas. They hope to gain some attention at the festival, which attracts scores of technology enthusiasts, entrepreneurs, and venture capitalists interested in seeing the latest innovative ideas.

Caleb Elston, one of the founders of Yobongo, which is based in San Francisco, said the timing of the app's release, a week before South by Southwest, was "no accident."

"It is the perfect storm of developers, designers, and business people in a sphere where there is a natural social dynamic for networking," he said. "Lots of services already help you connect with your friends, but the point of South by Southwest is to meet with new people that have your interests."

The services are a little different from one another. GroupMe, Beluga, Kik, TextPlus, and PingChat all allow people to create groups and invite their friends to chat in a group session. HurricaneParty performs a similar function but with the specific goal of organizing a party or get-together. Yobongo allows its users to join a group chat with nearby people.

—Jenna Wortham, The New York Times



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#### Protection means peace

In the West Bank, Israel acts to protect itself

By Rachel Bandler
STAFF COLUMNIST

On Tuesday, Wissam Jarjoui wrote a response to my opinion piece "Don't settle for settlement condition," in which he argued that settlements were a major obstacle to peace. I hope to address a number of his claims and to further clarify why Israeli construction in the West Bank should not be made into an arbitrary gauge for peace.

First, it is important to recognize that Israel wants the Palestinians, both in the West Bank and Gaza, to prosper and flourish. It is to everyone's benefit and the surest way to peaceful co-existence. In the 1970s, the West Bank and Gaza emerged as the fourth-fastest growing economy in the world, ahead of both Hong Kong and Singapore. It was only in 2000, when the brutal intifada began and Israeli innocents were senselessly murdered, that the economic gains were reversed. Today, thankfully, the West Bank is experiencing improved economic success and a new city is being built. Gaza is beginning to export crops again. Hopefully, cooperation can continue and both Israelis and Palestinians will thrive.

Jarjoui attributes a number of grievances to Israel. However, he does not thoroughly examine the historical context in which the supposed grievances arose. The narrative given does not account for pragmatic and redeeming considerations on Israel's part.

For example, one criticism of Israel is the limits it imposes on Palestinian mobility in the West Bank. It was not mentioned that Israel constructed the security barrier—the vast majority of which is chain link fence—in order to prevent suicide bomb-

ings. Israel did not wake up one day and decide to build a fence; it has a right to defend the lives of its civilians, and Israelis have the right to ride a bus or eat in a cafe without fear of being blown up. The security fence and checkpoints have successfully reduced suicide bombings by catching the attackers before they can enter Israel. Unfortunately, many have tried to enter via ambulances or as women pretending to be pregnant.

#### Israel did not wake up one day and decide to build a fence; it has a right to defend the lives of its civilians.

Israel was also criticized for demolishing Amin Haj Husseini's hotel in East Jerusalem, which Jarjoui describes as "a symbol of the Palestinian identity." There was no mention that Husseini, the Grand Mufti of Jerusalem during World War II, was a defender of Nazi ideology and a conspirator with Hitler and Eichmann. At Eichmann's trial in Nuremberg, testimony was given that "the Mufti was one of the initiators of the systematic extermination of European Jewry and had been a collaborator and adviser of Eichmann and Himmler in the execution of this plan."

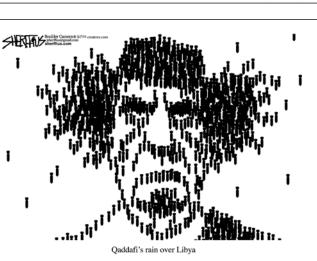
Additionally — and unfortunately — the Palestinian and Hamas leadership are preoccupied with fighting amongst themselves for power and Western money. Israel is used as an excuse and a target. Palestinian leaders haven't prepared their people for peace, as the Palestine Papers released by Al Jazeera proved. On the contrary, the

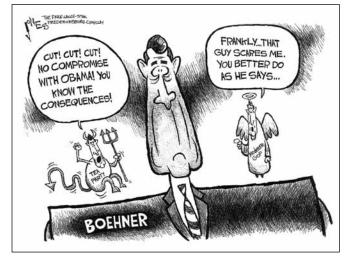
indoctrination of children to hatred and martyrdom is rampant in Hamas television content, newspapers, and textbooks. Israel has been wiped off the map in Hamas media, and martyrs are glorified. Just today, the Al-Amari youth center in the West Bank was sponsoring a football tournament in the name of Wafa Idris, the first female Palestinian suicide bomber. Is a society that teaches its children to honor suicide bombings ready for peace? Surely settlement-building, which employs Palestinian construction workers, is simply a diversion.

Likewise, if building in the West Bank really was the primary impediment to peace, then the Palestinians would have come to the bargaining table before the ninth month of the Israeli building freeze, which was only 10 months long. To establish a long-lasting and meaningful peace, the Palestinians should not have squandered 90 percent of the freeze. This again illustrates that the main obstacle to peace with the Palestinians is not the number of houses built in Ariel last month, which is a relatively minor issue in the grand scheme of things.

Using popular rhetoric and slogans, such as Israeli settlements being the "embodiment of the occupation," does not add substance to a conversation that should be an accurate and factual discussion. Both sides of the conflict have suffered, Israelis and Palestinians alike; that is undeniable. However, it is unfair to accuse Israel blindly of injustices without considering historical circumstances and taking Israeli security concerns into account. Truth and falsehood are intricately woven together, and it is each individual's responsibility to evaluate claims and to seek the truth, which, superficially, is not always apparent.









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Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will

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#### **ALBUM REVIEW**

#### Lupe's Third

#### Lasers is a turbulent triumph full of creativity and controversy

By Jeff Z. Chen
STAFF WRITER

Lasers is an album to die for. Just ask Lupe Fiasco himself, who once revealed to *The Guardian* that at one point during its production, he was "super-depressed, lightly suicidal, at moments medium suicidal — and if not suicidal, willing to just walk away from it all completely."

Indeed, behind the explosion of compressed vocals and electronica-laced piano riffs, Lasers is an album mired in controversy, an internal struggle between creative genius and executive mandate. "I love and hate this album," says Lupe. "A lot of the songs that are on the album, I'm kinda neutral to. Not that I don't like them, or that I hate them, it's just I know the process that went behind it. I know the sneaky business deal that went down behind this song, or the artist or singer or songwriter who wrote this hook and didn't want to give me this song in the first place. The creation of the album was a very painful, dark, fucked-up process."

I love Lupe Fiasco. I've loved him since his fiery debut cameo in Kanye's "Touch the Sky," followed him to "Superstar," tagged along to "Kick Push," trailed with him to "Daydreamin." To me, Lupe is *the*  21st century poster boy of hip hop. His imagination is unlike any other; he is not Afrocentric, not gangsta, not conscious or political. He is absolutely unlabelable. Lyrically, he's a master storyteller, weaving vivid tales about indigency, parenting, romance, ambition, terrorism, religion, fame, child soldiers, robots, and skateboards. He loves to play with extended metaphors and unusual rhyme schemes,

# His imagination is unlike any other; he is not Afrocentric, not gangsta, not political. He is unlabelable.

almost with the ease of a child prodigy. But aside from "Superstar," few to none of his songs have been accepted into mainstream corpus. Critics point to his lack of ability to craft a catchy chorus, which has never been much of a priority for either Lupe or his fanbase. With *Lasers*, however, whether under pressure from Atlantic Records or simply on his own whim, this problem has been strongly and aggres-

sively quelled.

Lasers is an album that straddles precariously between the mainstream and the independent. For the album, Atlantic has pulled a myriad of mainstream producers; uniquely, Lasers credits these producers in the titles of each song, a small touch that reflects Lupe's distinct sense of pure musicianship. Lupe's poignant, imaginative lyrics sound genuinely fantastic supported by these production

What irks me most about the reception of the album is how many critics have accused Lasers of being a sellout album, a flirtation with the mainstream and a deviation from "the old days." While the assembly of the tracks in *Lasers* is in no way as collective as those in *The Cool* (the latter being more of a concept album), it feels raw and genuine, pained and fought for. The accusation that the addition of catchy hooks and electronic baselines constitutes a cowardly retreat into the "mainstream" is hilariously misguided.

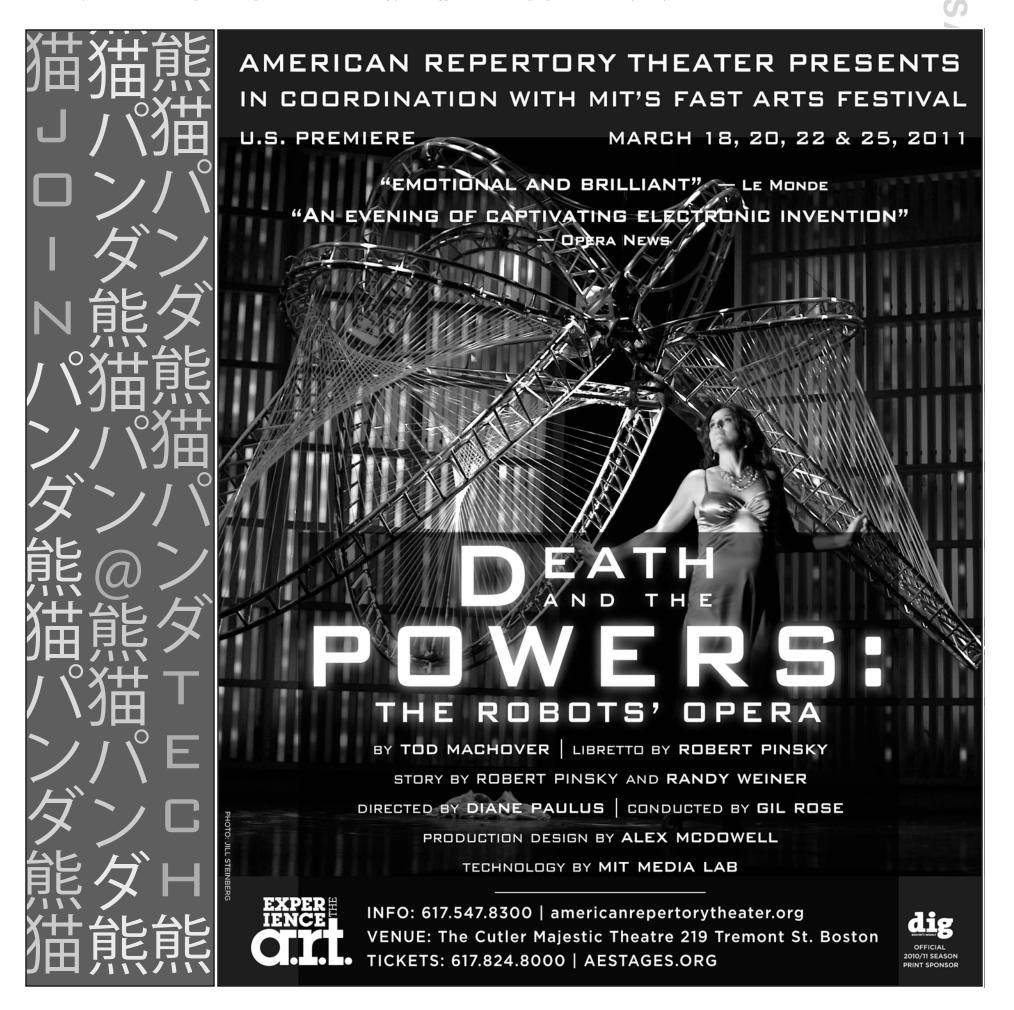
It's difficult to select even a few tracks that can represent the album since each piece has its natural beauty, but for me, "All Black Everything" stuck out as more of a throwback to the Food & Liquor days, with simple production and lyrically dom-

★★★★ Lasers Lupe Fiasco Released March 8, 2011

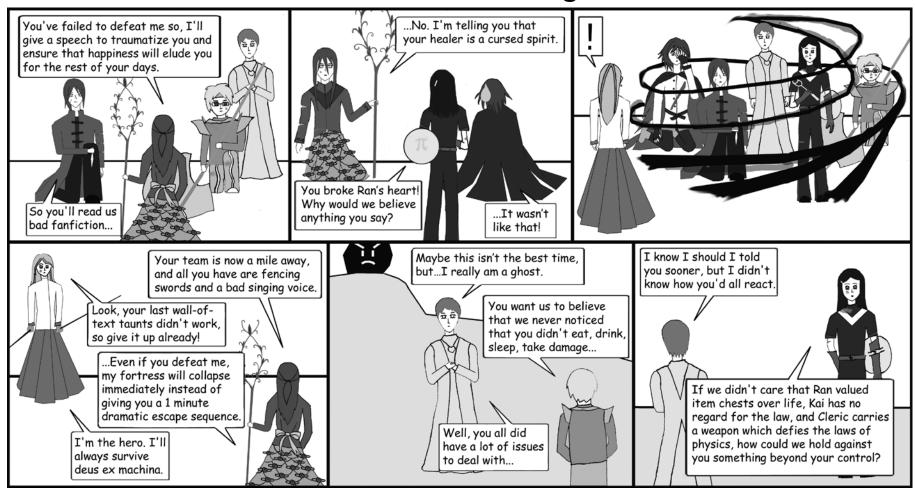
**Atlantic Records** 

inated verses. It weaves a story of an alternate future of racial and secular harmony, where "black woman voted head of Ku Klux Klan, Malcolm Little dies as an old man, Martin Luther King read the eulogy for him, followed by Bill O'Reilly who read from the Qur'an." It's profound, and even a little funny, and a perfect reminder of Lupe Fiasco at his absolute best.

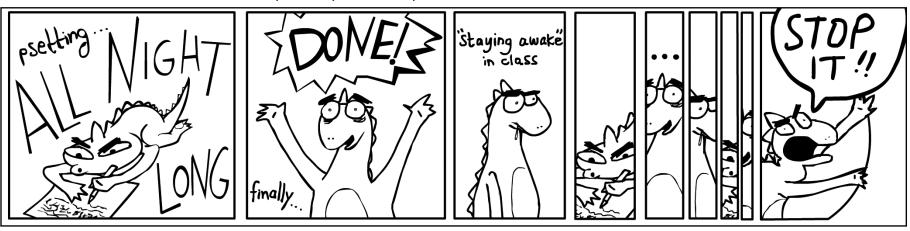
I feel almost impotent in writing this review, because *Lasers* needs no explanation, defense, or advocation. You simply need to listen for yourself. *Lasers* is Lupe Fiasco's heart, naked and exposed, spilled onto spinning record disks and bouncing, electric waveforms. It's an imperfect, pained ode to us, the fans, reminding us that when things feel down, just remember: Love Always Shines Everytime, Remember 2 Smile.



#### Somewhere on the Search for Meaning... by Letitia Li



#### Arthursaurus Rex by Ramya Swamy



**Dilbert** by Scott Adams

#### **Crossword Puzzle**

Solution, page 14

#### **ACROSS**

- 1 Last letter of words?
- 4 Tango teams
- 8 Parsley servings
- 14 Gods of ancient Rome
- 15 Noble rank
- 16 Actress Piper
- 17 Brown-and-white cow
- 19 Shoe liner
- 20 Guevara and others
- 21 Snooze
- 22 Park employees
- 23 Penultimate round
- 24 Monument figure
- 25 Fearless daring
- 28 Academy frosh 30 Hawkins of Dogpatch
- 31 Speak like Sylvester 35 Edberg or Sorenstam
- 37 Telescope element
- 38 Salad-service piece
- 40 Ecole attendee
- 42 Rump

**FUN FUN FUN FUN FUN FU** 

- 44 Click beetle
- 49 Levels off
- 50 Amati's hometown
- 51 Dead 'uns
- 53 Installments
- 54 Quick impression
- 55 Fast-food customers

- 56 Tenant
- 57 \_\_-Ude, Russia
- 58 Fam. member
- 59 Infamous Ford models
- 60 A.J. of auto racing
- 61 Go out with

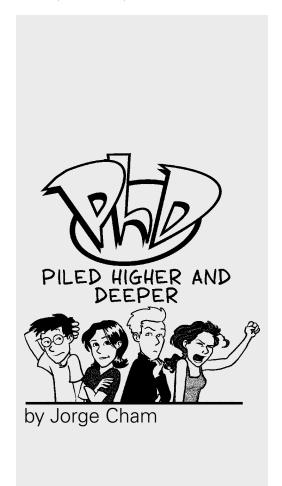
#### DOWN

- 1 Border cutters
- 2 Premier pointillist 3 Burnt shade
- 4 Become rigid, in a way 5 Profligates
- 6 Cookie sandwiches
- 7 Stone and Stallone 8 Cut into thin pieces
- 9 Straw hats 10 Countrified
- 11 Raymond Burr TV series
- 12 Arizona river
- 13 Leak slowly
- 18 Mil. division 23 Soft leather
- 25 Poplar tree
- 26 Can metal
- 27 Certainly!
- 29 Nightstand pitchers 31 Elec.-modulated optical device
- 32 Wrath

- 42 55 56
- 33 Certainty
- 34 Wrongly self-willed
- 36 Common
- 39 Male hawk used in falconry
- 41 Nickel, for instance
- 43 Follows
- 45 Part of OAS
- 46 Soothing skin creams
- 47 Menu listing
- 48 Fight, country-style
- 50 Gian \_\_ Menotti

- 51 Nor'easter, e.g.
- 52 Opinion pg. 53 Rounded ottoman

Friday, March 11, 2011
The Tech 7











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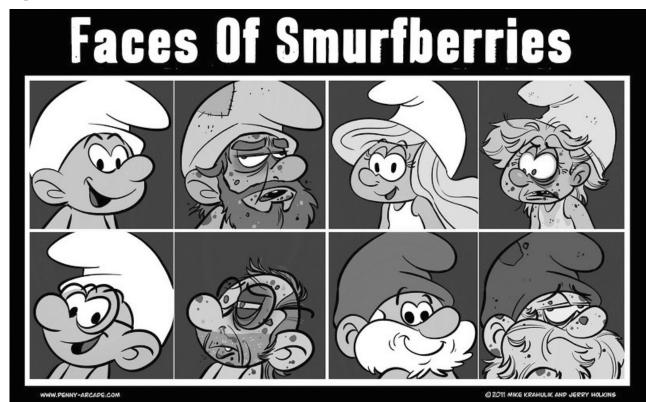






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#### **Space Beans, Red Racers**



#### and Mike Krahulik

by Jerry Holkins

#### Sudoku

Solution, page 14

6		8				7	2	
	3	5		7	9			
					1			5
3						2	7	
	7	9				4	8	
	8	2						3
9			5					
			1	2		8	9	
	2	3				5		7

.COM

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

#### **Techdoku**

Solution, page 14

24×			120×		
19+			2-	3	
		18×	<b>-</b>	2×	
12×	5+	<del>- </del>	3+	14+	
		2×	-		5-
20×		<b>-</b>	18×		_

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

8 THE TECH FRIDAY, MARCH 11, 2011 THE TECH 9



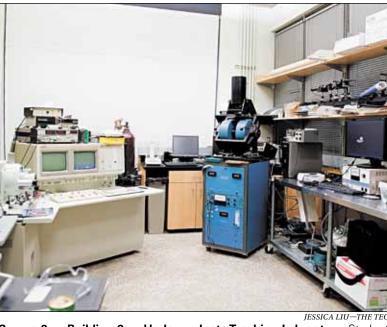
**Course 16 — Building 37 — Man Vehicle Lab.** The MVL studies the cognitive and physiological limitations imposed by spaceflight. Dava J. Newman's PhD '92's BioSuit spacesuit concept would give astronauts an unprecedented amount of mobility, yet still maintain the same level of pressure as conventional spacesuits.



drugs, metalloenzyme models, bacterial multicomponent monooxygenases, Way, and replicate Rutherford's gold foil experiment, among other projects.



Course 5 — Building 18 — Lippard Lab. Research at the Lippard lab focuses on bioinorganic chemistry. In particular, Lippard studies platinum anticancer modern physics. J-Lab students verify the value of the elementary charge, determine the structure of the Milky



Course 3 — Building 8 — Undergraduate Teaching Laboratory. Students use the teaching laboratories to study biomaterials, chemical synthesis, and physical and electronic properties in 3.014 and 3.042.

#### Labs around MIT is known for its world-class research facilities, but most undergraduates have only been in labs from one or two departments. *The Tech* visited labs from 10 different courses at MIT. Do they look as you expected



Course 20 — Building 16 — Niles Lab. The Niles lab uses biochemical methods to engineer Course 7 — Whitehead Institute — Weinberg Lab. The Weinberg lab investigates tools for studying infectious diseases and model organisms. Niles's current work focuses on cancer stem cells and mechanisms of metastasis. Ras, the first human oncogene, malaria parasite biology and controlling RNA function.



was discovered by the Weinberg lab in 1979.

Course 10 — Building 66 — Gleason Lab. The Gleason Lab uses chemical vapor deposition of thin-film polymers to create sensors. The lab has been creating a solar cell from these polymers, which can be deposited on virtually any surface.





Course 4 — Building 7 — Architecture Studio. Students take classes, work on projects, and sometimes sleep in the architecture studio.



Course 2 — Building 3 — Pappalardo Lab. The Pappalardo Lab is the Course 2 undergraduate teaching laboratory and is home to MIT's primary machine shop. Many mechanical engineering classes, including 2.004 (Dynamics and Control II), 2.14 (Analysis and Design of Feedback Control Systems), and 2.671 (Measurement and Instrumentation) are held here.

**Course 6 — Stata Center — Guttag Lab.** The Guttag lab uses computer science to solve medical problems and design medical technology. Guttag's work includes the development of both software-based medical instrumentation and decision and wireless networking systems.

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Kresge Auditorium, 4:00 p.m.

All members of the MIT community are invited.







# In better economy, self-help increases

Tuition, Page 1

Hicks said they felt comfortable increasing the self-help level this year mostly because MIT is one of the few schools that have the generous policy that allows students to replace self-help with outside awards and is the only elite school (among Stanford and Ivy League schools) to allow Federal Pell Grants to replace self-help instead of the MIT scholarship gift-aid.

As to why self-help rose more for students with family incomes under \$75,000, Hicks said that students from higher-income families actually take out more loans, and Pell Grants primarily go to families making under \$50,000. "We felt asking those under \$75,000 to do more was the fairest," said Hicks.

"We appreciate that the selfhelp level rose this year but believe that by matching government grants we will still be able to help students from lower income levels come here," said Daniel E. Hastings PhD '80, dean for undergraduate education. "In addition, even with the modest increase, the potential indebtedness is reasonably commensurate with starting salaries when a student goes to work."

Hicks said self-help cost was \$8,600 around 1998, far higher than the current level. They have made a concerted effort over the years to bring it down, most recently to \$2,850. But in an effort to slow down the growth of the financial aid budget this year, they felt raising self-help was the best solution. So will the self-help level decrease in the near future? "Hard to say, but probably not," said Hicks.

When asked whether she thinks students will have a financially more difficult year coming, especially with the rising costs of housing and dining plans, Hicks responded no, as they have taken all

those increases into account. She admitted, however, that some students who didn't have to take out a loan before might have to do so next year. She thinks, however, that it's a wise investment.

But apparently, the announced financial aid budget isn't a cap. Sarah B. Brady, a senior financial analyst from the Office of Budget, Finance and Treasury, said, "We award financial aid according to policies that are set. And if it means that we have to spend more on financial aid than what we've estimated, we do so." Hicks concurred by citing that they went over the budget for financial aid in 2008 amidst the sudden economic downturn.

Following this increase in tuition and self-help, a reasonable concern is whether there will be a negative impact on the yield of new MIT admits choosing to attend the Institute. Schmill does not think there will be too much change. He also does not think that there is a relationship between financial aid changes and the enrollment increase, as the full needs of all students are met.

"Yes, there are issues we need to manage with an increased enrollment. But I am a very strong supporter of increasing the class size. Not only will it allow MIT to increase its impact on the world by educating more students, but also more students on campus will enhance the living and learning environment for all," said Schmill.

Hicks said MIT has one of the most generous financial aid programs. "Our yield for the students [whose families make] under \$75,000 is much higher than our yield for students above \$75,000," said Hicks. She also cited MIT's need-blind admission policy for both domestic and international students as an example of MIT's generosity.

# \$7500 \$6000 \$4750 \$4750 \$4750 \$2850 \$3400 \$3400 \$3400 \$2850 \$2850 \$1500 \$2009 \$2010 \$2011

#### Chen cites Sangeeta Bhatia as inspiration

Lemelson Prize, Page 1

was when [I] first became excited about biologists talking to engineers and engineers talking to biologists," Chen explained.

At the Harvard-MIT Division of Health Sciences and Technology, Chen is a member of Sangeeta N. Bhatia PhD '97's lab. Chen, who was inspired and motivated by Bhatia, regards Bhatia as a role model who "is an MD, PhD, entrepreneur, and a mom, and makes it quite effortless to pull it all together."

At 29, Chen is well on her way to becoming a distinguished biomedical engineer. Since she earned a BS in Bioengineering from UC Berkeley and an SM in Engineering Sciences from Harvard, she has accumulated an impressive list of achievements. Chen

won the first prize in the graduate division of the Collegiate Inventors Competition, a Biomedical Engineering Society Graduate Students Research Award, the MIT Graduate Woman of Excellence Award, the National Defense Science and Engineering Graduate Fellowship, and the National Science Foundation Graduate Research Fellowship. She co-founded Sienna Labs a biotech start-up that is developing technology to improve laser medicine for use in skin diseases - with fellow MIT graduate Todd Harris PhD '08.

Looking toward the future, Chen plans to dedicate herself fully to Sienna Labs. She hopes that by winning the Lemelson Prize, she can inspire and act as a role model for the world's next generation of inventors.

Friday, March 11, 2011 The Tech 11



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Director of Boston Maum Meditation Center

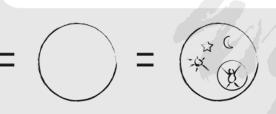
#### TIME AND PLACE

Wednesday, March 16 7:00pm—8:00pm Room 4—231

maum\_officers@mit.edu

#### **ABSTRACT**

The absolute of humans is to change from the human mind to the infinite mind of the universe. This lecture will illustrate the difference between the human mind and the Universe Mind, explaining why humans are living in an illusion world within their minds. The speaker will also describe the difference between living in the real world verses living trapped inside the human mind, and most importantly, provide the solution to changing human mind to the infinite mind of the universe.



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Dinner served at 8:00 PM



Dinner served at 8:00 PM

FRIDAY, MARCH 11, 2011 THE TECH 13

#### Fellows emphasize role of 'cooperative learning'

MacVicar, Page 1

shape thinking and teach students the correct information without destroying confidence, a process that requires "joint exploration" of the material.

Verghese also viewed teaching as largely about the interaction with students. "The amazing thing is that, every term, you learn while you teach," he said.

Verghese views teaching as a fluid process, not static: "You never teach a canned course, you're always rethinking things ... people can be teaching the same things for 10 or 15 years, but it's never the same things."

More than rote facts, Verghese finds teaching problem solving and ways of thinking to be extremely useful. He recalls students who have come back to him saying they "value their MIT education for how it taught them to think."

"These things will travel with you, it doesn't need to be in this subject," said Verghese of the basis of creative thinking and problem solving. Verghese, along with Professor Alan V. Oppenheim '61, developed 6.011 (Introduction to Communication, Control, and Signal Processing), a course typically taken by Course VI juniors and seniors. In developing the course, Verghese said one of the most valuable things he realized was the importance of not trying to do everything at once. Verghese believes that going to further depths and exploring a subject can be far more rewarding than a broader but shallower exposure.

The value of depth in education was similarly expressed by Winston. "My objective has always been to tell the whole story — not just the skills, but the objectives behind the skills," he noted.

A semester of classes is worth it to Winston if a single person comes away with a powerful idea that makes a difference in his or her life. "That's where the real thrill comes from, hearing that kind of impact on someone's time at MIT," Winston said.

"We are witnessing a change in the way education is delivered," Winston said, explaining that as information is made more publicly available — such as through the resources provided by MIT's Open-CourseWare — the experience of being at a university like MIT is changing. When Winston took 6.01 as a MIT undergraduate, his professor was Amar G. Bose '51, founder of Bose Corporation. "Just being in the same classroom was a thrill by itself," Winston remarked.

However, Winston acknowledged a changing educational dynamic. He believes that at this point in time, simply being in lectures is not as valuable was it was before and that contact with faculty will increasingly happen outside of the classroom

Still, Winston says he tries to make MIT "a more human place," starting with learning the names of the students in his classes. "It's not always easy with 200 students, but I do what I can," he says.

In that vein, one of Winston's main goals is to give lectures that are both engaging and informative. He does not allow laptops in his lectures, but in return for students giving him their attention, he tries to make his lectures valuable. "I tell a lot of stories in class because I think they have educational value," said Winston, who views humans as "fundamentally a storytelling species"

Verghese echoed Winston, saying that "the challenge is getting

students into lecture." Similar to Winston, Verghese believes there is importance in maintaining communication with the class. "It's not just appearing for a performance at the front of the lecture hall and then disappearing."

Schuh also saw making lectures relevant as one of the greatest teaching challenges. "I would like to give a lecture and teach a course that's sufficiently informative that people will come to class," Schuh remarked, remembering classes from his undergraduate years where he could get all the information he needed out of a book — and in less time than from lecture - rendering lectures meaningless. His goal, therefore, is to "add more value than what is in a book ... I want it to be a sufficiently interesting experience than people learn from me."

As a professor, Schuh hopes to produce students who go on to make a difference and impact the world. As an undergraduate, teaching "was the last thing on Earth I wanted to do." In fact, he started studying materials science somewhat by chance. "When I went to college, they handed me a Scantron form and a pencil ... I picked the first thing that I didn't know what it was," said Schuh, who decided he wanted to be an engineer in order to better the world. However, he realized he could help produce that same kind of person through teaching.

Schuh was not the only Fellow to start college without a clear plan. "I had no idea what I want[ed] to do when I showed up at MIT," Winston recalled. He went on to receive his bachelor's degree and master's degree — both in electrical engineering — and PhD in computer science, all from MIT. After receiving his PhD, Winston became an as-

sistant professor and has been here ever since. Aside from the increase in the number of women enrolled at the Institute, Winston says that "things are much the same as they always were."

Winston thinks being at MIT his entire career gives him a unique perspective of the Institute. "The perspective of what it's like to be an undergraduate here, that's hard to get any other way ... it's something you have to experience to appreciate."

Furthermore, he believes the "fire hose" learning culture at MIT fosters bonding between students. "It's a place where people can bond

over thinking," Winston said. "[MIT is] characterized by all-nighters, smart people, tremendous opportunity, too much to do, with a focus on what you know and what you can contribute ... it's a place people never forget."

The other Fellows also praised the unique environment at MIT. "MIT is consistently awesome," said Schuh. "The people here just live for this stuff ... the energy level for science and technology is really amazing."

Coming to MIT was "one of the best decisions I ever made in my life," said Sanyal. "MIT is an exceptional place."

#### Former MIT professor pleads guilty to false statements in federal research grant application

A Falmouth man was convicted on March 3 in federal court of making false statements in a federal research grant application aimed at improving scientists' understanding of T-cells and autoimmune diseases

Former MIT biology professor Luk Van Parijs, 40, pleaded guilty before U.S. District Judge Denise J. Casper to one count of making a false statement. Van Parijs faces up to five years imprisonment, to be followed by up to three years of supervised release and a \$250,000 fine. Judge Casper scheduled sentencing for June 14, 2011.

Had the case proceeded to trial, the government's evidence would have proven that in 2003, Van Parijs knowingly and willfully made materially false, fictitious, and fraudulent statements to improve his competitiveness in obtaining a research grant from the National Institutes of Health. Specifically, Van Parijs falsely claimed that his lab had generated a particular type of transgenic mouse and that his lab had obtained particular results in experiments.

United States Attorney Carmen M. Ortiz and Susan J. Waddell, Special Agent in Charge of the U.S. Department of Health and Human Services, Office of the Inspector General, Boston Regional Office, made the announcement March 3. The case is being prosecuted by Assistant U.S. Attorney Gregory F. Noonan of Ortiz's Health Care Fraud Unit.

-U.S. Department of Justice Press Release, March 3, 2011

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#### Penny Arcade Expo: Boston levels up for weekend

Sold-out show features Boston's reputation as major video game development center

By Hiawatha Bray

This weekend's Penny Arcade Expo, also known as PAX East, could elevate Boston's reputation as a major center for video game development while providing three days of thrills for more than 60,000 fans of video, card, and board games.

Several of the biggest game companies at the sold-out show at the Boston Convention and Exhibition

The MIT Shakespeare Ensemble presents

Center this weekend have Massachusetts roots.

Harmonix Music Systems of Cambridge, creator of the *Guitar Hero* and *Rock Band* music games, will be there; so will Turbine Inc. in Needham, maker of *The Lord of the Rings Online*; and Irrational Games of Quincy, which produced the best-selling adventure game *BioShock*. PAX East also provides a major venue for smaller companies to show off their wares, some of them local.

"It will certainly have a positive impact because it's a huge show and it shines the spotlight on the whole area for several days," said Jon Radoff, chief executive of Disruptor Beam Inc., a new company in Somerville that's creating games for the social network Facebook.

The weekend show is the East Coast version of PAX, a gaming convention launched in Seattle in 2004 by comic strip artists Jerry Holkins and Mike Krahulik. When PAX East made its Boston debut at the Hynes Convention Center last year, more than 52,000 people turned up, far more than the facility could easily handle. Since then, Holkins and Krahulik have agreed to hold the show at the much larger Boston Convention

and Exhibition Center through 2013.

James E. Rooney, executive director of the Massachusetts Convention Center Authority, said his agency is trying to negotiate a long-term contract that would make PAX East an annual Boston tradition.

"It looks like it'll become the largest electronic gaming show in this country's history," said Rooney, predicting that PAX East will become larger than the show's Seattle edition. "It looks like it'll just continue to grow."

Rooney used the show to support the convention center authority's argument for expanding the center to handle bigger events, the subject of a study being prepared for Governor Deval Patrick. PAX East attendance has been limited to 21,000 visitors per day, forcing show organizers to halt ticket sales on Tuesday.

PAX East cofounder Holkins said that Boston is exactly where he wanted the show to be. "We preferred the Hynes Center, with the option to grow into the BCEC, over anything we saw anywhere else — New York included," he wrote in an e-mail. "Plus, every time I've been to Boston, I've loved the town. ... I felt at home there immediately, and I am not a person for whom such things come easily."

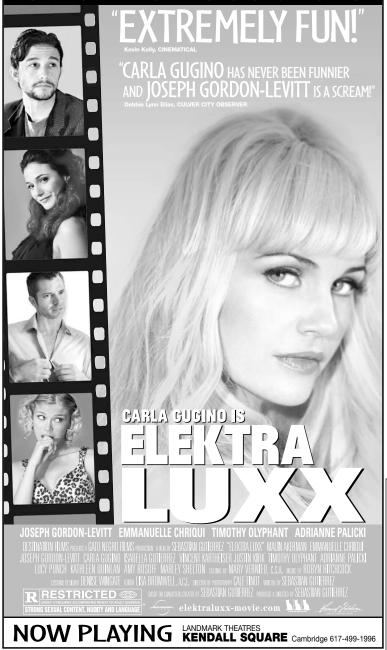
Highlights of the show will include the first public showing of Kingdoms of Amalur: Reckoning, a new video game from 38 Studios LLC, the company founded by former Red Sox pitcher Curt Schilling. Last year, Schilling agreed to move his company from Maynard to Providence in exchange for a \$75 million loan guarantee from Rhode Island. Still, Schilling will debut his game just a couple of miles from Fenway Park. "This is our backyard," Schilling said. "Probably won't have a more captive audience."

Thursday, at a conference sponsored by MIT's Sloan School of Management, local gaming executives said the publicity from PAX East might offset Boston's limitations as a venue for game development.

Disruptor Beam's Radoff at first called Boston "one of the best places in the world where you can start a company," but then complained about the scarcity of investment capital.

"The financing environment just kind of stinks here for financing a consumer products company," he said, adding that it was hard to find suitable workers. "There's not a lot of serious reasons you'd start a game development company in Massachusetts."

Still, Robert Ferrari, vice president of publishing and business development at Sanrio Co.'s video game operation in Boston, said the popularity of PAX East could increase the political clout of developers. "I think it's going to have incredible impact,"



March 11-12, & March 17-19, 8:00 PM March 13, 2:00 PM La Sala de Puerto Rico

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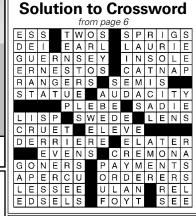
Percussion?

Low Brass? Oboe?

#### MIT Concert Band needs you!

The MIT Concert Band is looking for additional players, especially in the *trumpet*, *low brass, french horn, and percussion* sections. We have several more concerts this year (including tour to Washington, DC) and invite all undergrads and anyone in the MIT community to join.

Contact **bavicchi-lives@mit.edu** for more information or visit the website at **band.mit.edu**.



#### Solution to Sudoku

From page 7

6 1 8 4 3 5 7 2 9
4 3 5 2 7 9 1 6 8
2 9 7 8 6 1 3 4 5
3 6 4 9 5 8 2 7 1
5 7 9 3 1 2 4 8 6
1 8 2 7 4 6 9 5 3
9 4 1 5 8 7 6 3 2
7 5 6 1 2 3 8 9 4
8 2 3 6 9 4 5 1 7

#### Solution to Techdoku

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#### **SPORTS SHORT**

#### Women's Tennis sweeps NYU

The MIT Women's Tennis team competed in their first match of the spring last Saturday, sweeping New York University 9-0 at home on the Carr Indoor Courts. The match was the first since their loss to Wellesley in

the NEWMAC Tournament semifinals in October.



The singles players were, in order, Lauren C. Quisenberry '14, Candace Wu '14, Julia C. Hsu '14, Bianca M. Dumitrascu '13, Katharine A.

O'Neal '14, and Melissa A. Diskin '11. All six Engineers won their singles matches without dropping a set, and they also won all three of the doubles matches by scores of 8-2, 8-4, and 8-0.

MIT next visits Colby College on Saturday before traveling to Los Angeles for their Spring Break trip, during which they will take on Caltech.

—David Zhu, Sports Editor

## Sailing opens spring with third place finish

The MIT Sailing team returned from its winter break on Sunday when it competed at the Sharpe Trophy races. The Engineers took third place in the six-team field at Roger Williams University, which took over the hosting duties due to icy conditions on the Charles River.



The event consisted of round robin racing between each of the six schools competing. Every pairing contested three races to compile a total record. The top four then competed in one-off events,

adding three more races to the overall record for the day.

MIT was ranked third after the first

MIT was ranked third after the first rounds of competition, compiling an 8-7 mark after sweeping Yale and winning two out of three races against Brown University. They went 1-2 against both Boston College and Harvard.

The Crimson got the better of Tech again in the final four races, but MIT was able to notch victories over Brown and Roger Williams to finish their day with a 10-8 ledger.

The Engineers will next compete on March 12 when they travel to Salve Regina University for the Wood Trophy. There is also an alumni race scheduled for the same day.

—Craig Kaufman, DAPER Staff

#### Lacrosse begins season with win Three players reach five points in 16-3 blowout over Gordon

By Mindy Brauer

DAPER STAFF

Laura M. Wacker '13, Erica W. Little '11, and Kathleen M. Kauffman '12 each registered five points as the MIT Wom-



en's Lacrosse team posted a 16-3 victory over Gordon College on Tuesday night in their first game of the 2011 campaign.

Wacker led all scorers with five goals, while Little tallied one goal and four assists. Kauffman recorded a hat-trick to go along with two assists as Kelly Duncan '11 notched three goals, one assist, and three draw controls. Stephanie C. Leger '11 tallied three groundballs, three draw controls, and two goals while Molly E. McShane

'13 chipped in three groundballs, two draw controls, and two goals. In 50 minutes of action in net, Allison E. Hamilos '12 turned away two shots as Sarah E. Ritter'14 closed out the game with one save.

MIT set the tone early by scoring five unanswered goals in the first 10 minutes and went on to hold a 9-0 advantage at halftime. Kauffman opened the scoring by connecting on a feed from Little just 1:38 into the game. Duncan followed with back-to-back goals, the second set up by Kaitlyn L. Nealon '14, while Leger's free-position strike proved to be the game-winning goal with 20:51 on the clock

Exactly 25 seconds later, Little began a string of three consecutive points as she found Wacker for two goals and recorded an unassisted marker of her own. A solo effort by Kauffman extended the Engineers' lead to 8-0, while Wacker completed the hat-trick with 10 seconds remaining in the frame.

A flurry of offensive activity kicked off the second half. Gordon ended the shutout 40 seconds into the period, while the Wacker-Little tandem answered with the duo's third goal of the night 31 seconds later. MIT increased its margin on Leger's unassisted blast, but the Fighting Scots then narrowed their deficit to 11-2.

McShane tacked on a free-position goal with 19:16 left to play, and the Engineers closed out the game with four straight goals as Kauffman earned the final three points on a goal and two assists.

MIT returns to action on Thursday, March 10 when it hosts Keene State College.

#### Men's Volleyball wins MIT Invitational

#### Engineers finish 4-0 in tournament, earn first title since '07 season

By Paul Dill

HEAD COAC

This past weekend, the nationally-ranked No. 13 MIT Men's Volleyball team dropped only one set en route to



its first MIT Invitational crown since 2007. With a 4-0 outing, the Engineers improved to 23-5 on the season, marking the program's seventh consecutive 20-win campaign.

Patrick J. Vatterott '13 was selected to the All-Tournament Team while David R. Thomas '12 was named the Tournament MVP.

MIT opened the weekend with a 25.

MIT opened the weekend with a 25-15, 25-15, 25-17 win over Emerson College. Kenneth M. Siebert '14 led the way

with 12 kills and a .364 hitting percentage to go along with five digs. Thomas posted eight kills and a .400 hitting performance, while Vatterott notched seven kills and two blocks.

Thomas powered the Engineers with 18 kills, a .607 hitting percentage, and five blocks in their 25-17, 25-27, 25-23, 25-13 victory over Lasell College. William B. Evans '14 recorded 13 kills and two aces as Siebert contributed 10 digs and eight kills. Vatterott registered six kills and four blocks, while Jeremy J. Velazquez '12 amassed 15 digs, earning him a place in the American Volleyball Coaches Association 15 dig club. Timothy R. Lee '11 compiled 50 assists, eight digs, and three aces.

In a 25-9, 25-7, 25-13 decision against Mount Ida College, Vatterott

was a force at the net as he racked up 10 blocks and six kills. Siebert had a teamhigh nine kills, and Thomas posted six kills and five blocks. Caine L. Jette '10 and Velazquez both finished with four digs, and Jette added three aces.

The Cardinal and Gray closed out the tournament with a 25-22, 25-21, 25-21 win over No. 12 Emmanuel College. Thomas put up 10 kills, five digs, and three blocks as Evans followed with nine kills and four blocks. Siebert tallied six digs, five kills, two blocks, and two aces, and Velazquez and Jette chipped in six and five digs, respectively.

The Engineers will host a tri-match on Saturday, March 12. MIT will play Daniel Webster College at 10 a.m. and Mount Ida College at 2 p.m.

#### **UPCOMING HOME EVENTS**

#### Saturday, March 12

Sailing Alumni race

Men's Volleyball vs. Daniel Webster

Men's Tennis vs. Bates College

Women's Lacrosse vs. Bridgewater

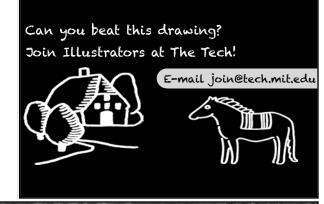
Men's Volleyball vs. Mount Ida College

10 a.m., Charles River

1 p.m., Carr Indoor Courts

1 p.m., Carr Indoor Courts
1 p.m., Steinbrenner Stadium

2 p.m., Rockwell Cage



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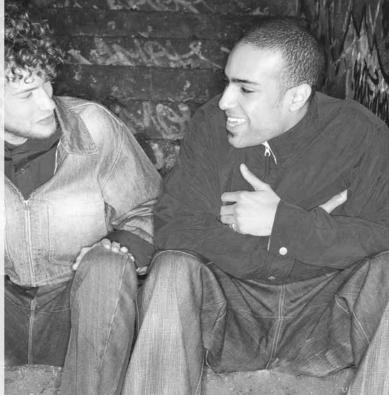
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